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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,291	10/14/2004	Martin J Edwards	GB02 0042 US	2229
•••	7590 02/21/200 CTRONICS NORTH A	EXAMINER		
	AL PROPERTY & ST	CHOW, DOON Y		
1109 MCKAY DRIVE, M/S-41SJ SAN JOSE, CA 95131			ART UNIT	PAPER NUMBER
			2629	
	- 			
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		02/21/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)		
Office Action Summary		10/511,291	EDWARDS, MARTIN J		
		Examiner	Art Unit		
		Dennis-Doon Chow	2629		
	The MAILING DATE of this communication	on appears on the cover sheet w	ith the correspondence address		
Period fo	• •				
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR F CHEVER IS LONGER, FROM THE MAILII nsions of time may be available under the provisions of 37 (SIX (6) MONTHS from the mailing date of this communicat period for reply is specified above, the maximum statutory are to reply within the set or extended period for reply will, by reply received by the Office later than three months after the ed patent term adjustment. See 37 CFR 1.704(b).	NG DATE OF THIS COMMUNI CFR 1.136(a). In no event, however, may a sion. period will apply and will expire SIX (6) MON y statute, cause the application to become Al	CATION. reply be timely filed ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).		
Status					
1)⊠	Responsive to communication(s) filed on	14 October 2004.			
-	•	This action is non-final.			
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
	closed in accordance with the practice ur	nder <i>Ex parte Quayle</i> , 1935 C.D). 11, 453 O.G. 213.		
Dispositi	ion of Claims		•		
5)□ 6)⊠ 7)□	Claim(s) 1-10 is/are pending in the applic 4a) Of the above claim(s) is/are wire Claim(s) is/are allowed. Claim(s) 1-10 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction is	thdrawn from consideration.			
Applicati	ion Papers				
10) [The specification is objected to by the Example The drawing(s) filed on is/are: a) Applicant may not request that any objection Replacement drawing sheet(s) including the Country The oath or declaration is objected to by the country Theorem 1.	☐ accepted or b)☐ objected to to the drawing(s) be held in abeyar correction is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d).		
Priority u	under 35 U.S.C. § 119				
12) [a)	Acknowledgment is made of a claim for for All b) Some * c) None of: 1. Certified copies of the priority docu 2. Certified copies of the priority docu 3. Copies of the certified copies of the application from the International Esee the attached detailed Office action for	uments have been received. Iments have been received in A e priority documents have been Bureau (PCT Rule 17.2(a)).	application No received in this National Stage		
Attachmen	t(s)				
2) 🔲 Notic 3) 🔯 Infon	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-94 mation Disclosure Statement(s) (PTO/SB/08) or No(s)/Mail Date	48) Paper No(Summary (PTO-413) s)/Mail Date nformal Patent Application 		

Application/Control Number: 10/511,291

Art Unit: 2629

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (2003/0048262).

Regarding to claims 1 and 7, Wu discloses an electronic device comprising a display panel (204, Fig. 2) having at least one substrate on which are formed display pixels defining a display area which information is displayed, the device further including a drive circuit for driving the pixels, and touch input means [0023] operable by a user to perform input functions, the touch input means comprising a plurality of touch elements which are spaced from the substrate of the display panel (Figs. 2 and 11) and a sensing circuit connected to the touch elements for sensing touching of the touch elements by a user [0023].

Wu does not explicitly disclose carrying both the drive circuit for the pixels and the sensing circuit of the touch input means are on the substrate. However, the examiner takes Official Notice that forming both a drive circuit and a sensing circuit, such as a drive circuit for display pixels and a sensing circuit of a touch input means, in a small electronic device is well known in the art. Therefore, it would have been obvious

Application/Control Number: 10/511,291

Art Unit: 2629

to one of ordinary skill in the art to integrate Wu's drive circuit and sensing circuit on the same substrate so that the size of the electronic device can be reduce.

Regarding to claim 2, Wu does not disclose using thin film circuits in the pixel drive circuit and the sensing circuit. However, the examiner takes Official Notice that using thin film circuits in a pixel drive circuit and a sensing circuit is well known in the art. It would have been obvious to one of ordinary skill in the art to use well known thin film circuits in Wu's pixel drive circuit and sensing circuit since Wu does not disclose how the pixel drive circuit and the sensing circuit are constructed.

Regarding to claim 3, Wu further discloses the electronic device includes a housing that surrounds the display area of the display panel, and the touch elements are located in the housing (Figs. 2 and 11).

Regarding to claim 4, Wu further discloses the display panel forms part of a display module which includes a frame in which the display panel is carried, and wherein the touch elements are mounted to the frame of the display module (Figs. 2 and 11).

Regarding to claim 5, Wu further discloses the sensing circuit is responsive to a due to a user touching the touch change in capacitance at a touch element [0023].

Regarding to claim 6, Wu further discloses the sensing circuit is responsive to a change in resistance at a touch element resulting from a user touching the touch element [0023].

Application/Control Number: 10/511,291

Art Unit: 2629

Regarding to claim 8, Wu further discloses the touch elements are arranged in one or more arrays extending adjacent one or more sides of the display panel (Figs. 2 and 11).

Regarding to claim 9, Wu further discloses the sensing circuit is responsive to touching of touch elements to control scrolling of information displayed in the display area [0023].

Regarding to claim 10, Wu does not explicitly disclose the display panel is an active matrix display panel. However, the examiner takes Official Notice that active matrix display panel is old and well known in the art. It would have been obvious to one of ordinary skill in the art to use an active matrix display panel as the display panel in Wu device because the active matrix display panel displays better image than the passive matrix display panel.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis-Doon Chow whose telephone number is 571-272-7767. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/511,291 Page 5

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dennis-Doon Chow Primary Examiner Art Unit 2629

D. Chow February 16, 2007